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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,586	03/09/2004	Shyam Kapur	7346-54US	4711
29858	7590	08/23/2006	EXAMINER	
BROWN, RAYSMAN, MILLSTEIN, FELDER & STEINER LLP 900 THIRD AVENUE NEW YORK, NY 10022			LEWIS, CHERYL RENE A	
			ART UNIT	PAPER NUMBER
			2167	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,586	Applicant(s) KAPUR ET AL.	
	Examiner Cheryl Lewis	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20 Sept. 2004</u> . | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> . |

Continuation of Attachment(s) 6). Other: (1) a copy of the exr's amendment to drawing figures 8A-10 and 11B-12 and (2) a highlighted copy of the applicants' oath.

DETAILED ACTION

1. Claims 1-23 are presented for examination.

PRIORITY

2. Applicant has complied and receives the benefit of priority of an earlier filing date to application 60/460,222 filed April 4, 2003.

INFORMATION DISCLOSURE STATEMENT

3. The information disclosure statements filed on September 20, 2004, complies with the provisions of MPEP § 609. They have been placed in the application file, and the information referred to therein has been considered as to the merits.

Oath or Declaration Defective, Heading

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required.

See MPEP § 602.01 and 602.02.

The oath or declaration is defective because:

- Non-Initialed/Non-Dated Alterations: Non-initialed and/or non - dated alterations have been made to the oath or declaration.

See 37 CFR 1.52(c).

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The applicants have made an alteration to the oath. The citizenship indicated for inventor Deepa Joshi was previously indicated as citizenship of the United States. However, the citizenship for the United States has been "crossed out" indicated by a strikethrough and replaced with the citizenship of India. Therefore, the correction was not dated and initialed by the applicant.

As a convenience to the applicants, the examiner has attached a highlighted copy of the oath, wherein the highlighted portion of the oath indicates where the change in the oath has been made from the United States to India.

Specification

5. The disclosure is objected to because of the following informalities:

In the Specification, paragraph 0001, lines 8 and 9, the applicants must provide the correct serial number and filing date for application "Systems and Methods for Search Query Processing Using Trend Analysis"; on page 13, paragraph 0048, line 19, the serial number is required; on page 16, paragraph 0057, line 16, the serial number is required; and on page 21, paragraph 0075, line 17, the serial number is required.

Appropriate correction is required.

Drawings

6. The drawings are objected to because drawing figures 8A-10 and 11B-12 depict a partial view of the drawing figures. A box and/or a line drawn around each individual

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drawing figure is needed to show each individual figure as a separate entity (MPEP 37 CFR 1.84(h)).

As a convenience to the applicants, the examiner has attached an amendment of drawing figures 8A-10 and 11B-12 to show by example, how to effectively amend drawing figures 8A-10 and 11B-12.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1, 6, and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2106 IV.B.2.(b)

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.

9. Claims 21-23 are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application within the technological arts. The use of a computer has not been indicated. These claims do not indicate use of hardware on which the software runs to perform the steps recited in the body of the claim. Software or program can be stored on a medium and/or executed by a computer. In other words the software must be computer-readable. The use of a computer is not evident in the claim. MPEP 2106.IV.B.1(a) refers to "computer-readable" medium with computer program encoded on it."

The examiner kindly requests that the applicants consider amending claims 21-23 to recite a "storage device". For instance, the preamble of claim 21 could be amended to recite "A computer program product comprising a computer readable medium encode with program code, the program code executed on a storage device

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including:". Likewise, dependent claims 22 and 23 could be amended to recite "The storage device of claim 21".

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1, 15, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 15, 21 recite "concept network", "a plurality of units", and "each element of the histogram vector".

The examiner does understand what a network is, but what is a "concept" network? What are these particular units that are each belonging to the "concept" network? What are the particular elements of the histogram?

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al. (Pat. No. 6,078,618 filed March 4, 1998, hereinafter Yokoyama) and Lee et al. (Pat. No. 6,311,181 filed March 19, 1999, hereinafter Lee).

14. Regarding Claim 1, 15, 21, Yokoyama teaches a motion vector estimation system.

The method and associated system for a motion vector estimation system as taught or suggested by Yokoyama includes:

grouping a set of queries into a plurality of subsets (col. 5, lines 10-67, col. 6, lines 1-67, col. 7, lines 1-67, col. 8, lines 1-60), generating a plurality of relationships defined between units, each unit has a frequency weight (col. 5, lines 10-67, col. 6, lines 1-67, col. 7, lines 1-67, col. 8, lines 1-60); selecting one of the units (col. 5, lines 10-67, col. 6, lines 1-67, col. 7, lines 1-67, col. 8, lines 1-60); construction a histogram vector for the unit, the histogram vector having an element corresponding the unit (col. 5, lines 10-67, col. 6, lines 1-67, col. 7, lines 1-67, col. 8, lines 1-60), each element of the histogram vector has a value representative of the frequency weight of the selected unit (col. 5, lines 10-67, col. 6, lines 1-67, col. 7, lines 1-67, col. 8, lines 1-60).

However, Yokoyama does not expressly teach subsets of a dimension.

Lee teaches subsets of a dimension (col. 5, lines 30-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Yokoyama with the method of Lee because Lee's method could enable the method of Yokoyama to comprise a database

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management system, wherein the database management system discloses multi-dimensional selective estimations of compressed histogram information.

15. Regarding Claim 2, Lee teaches a time dimension (col. 5, lines 30-46).

16. Regarding Claim 3, Lee teaches dimension is defined by reference to one or more demographic characteristics of users (figure 1).

17. Regarding Claim 4, Lee teaches dimension is a geographic dimension (figure 1).

18. Regarding Claim 5, Lee teaches the dimension is a vertical dimension representing a user context of the query (figure 1).

19. Regarding Claim 6, Lee teaches a unit dictionary in association with the histogram vector (col. 6, lines 1-67).

20. Regarding Claim 7, Lee teaches receiving a subsequent query (figure 1); parsing the subsequent query (col. 3, lines 1-30); obtaining the histogram vector for the constituent units from the unit dictionary (col. 4, lines 1-15); and responding to subsequent query bases at least in part on the histogram vector (col. 3, lines 1-30, col. 4, lines 1-15).

21. Regarding Claim 8-14, 16-20, 22, and 23, the limitations of these claims have been noted in the rejections of claims 1-13 presented above. They are therefore rejected as set forth above.

NAME OF CONTACT

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Lewis whose telephone number is (571) 272-4113. The examiner can normally be reached on 6:30-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

(571) 273-4113 (Use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper/amendment be faxed directly to them on occasions.).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/ Technology Center (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cheryl Lewis
Patent Examiner
August 19, 2006

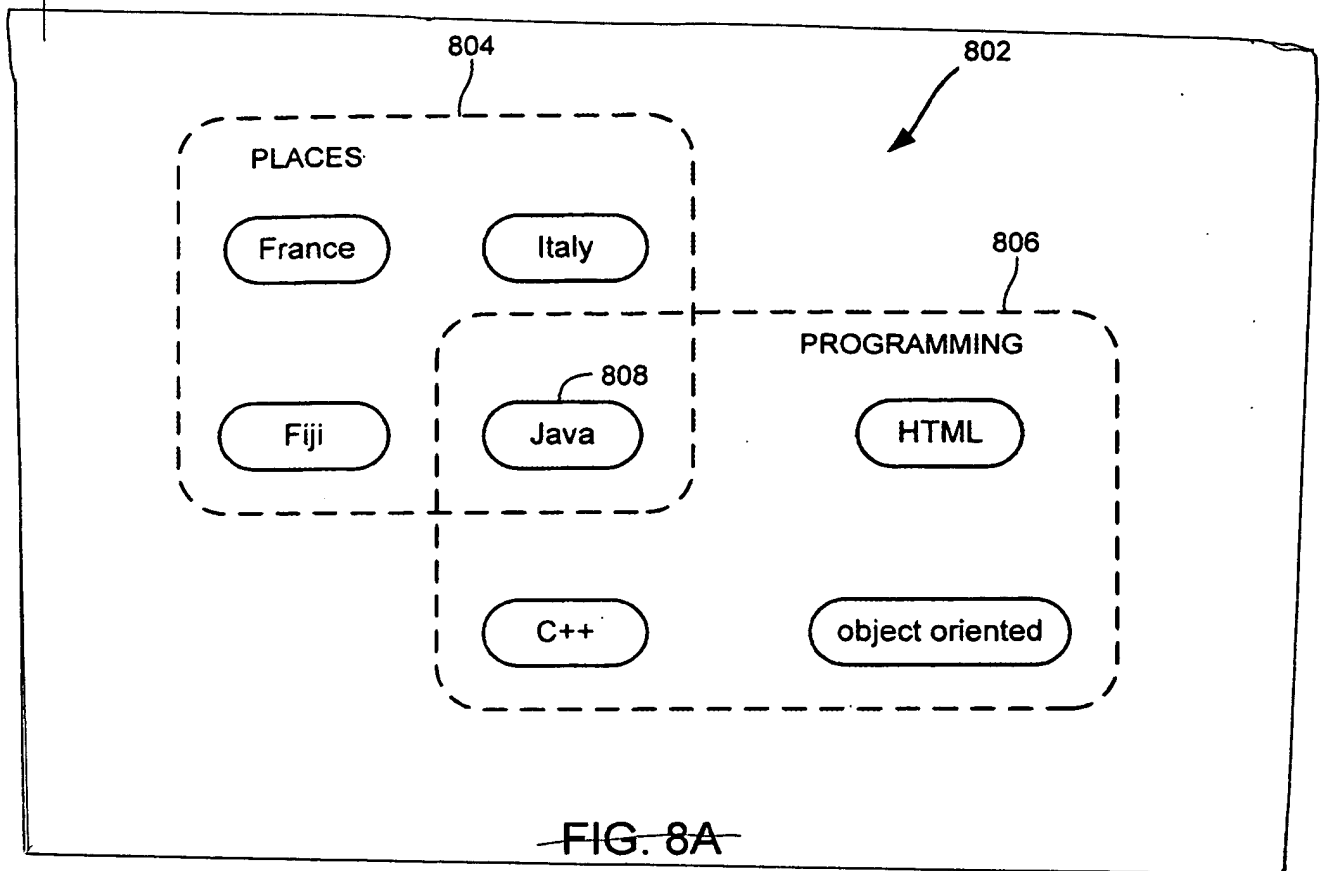


FIG. 8A

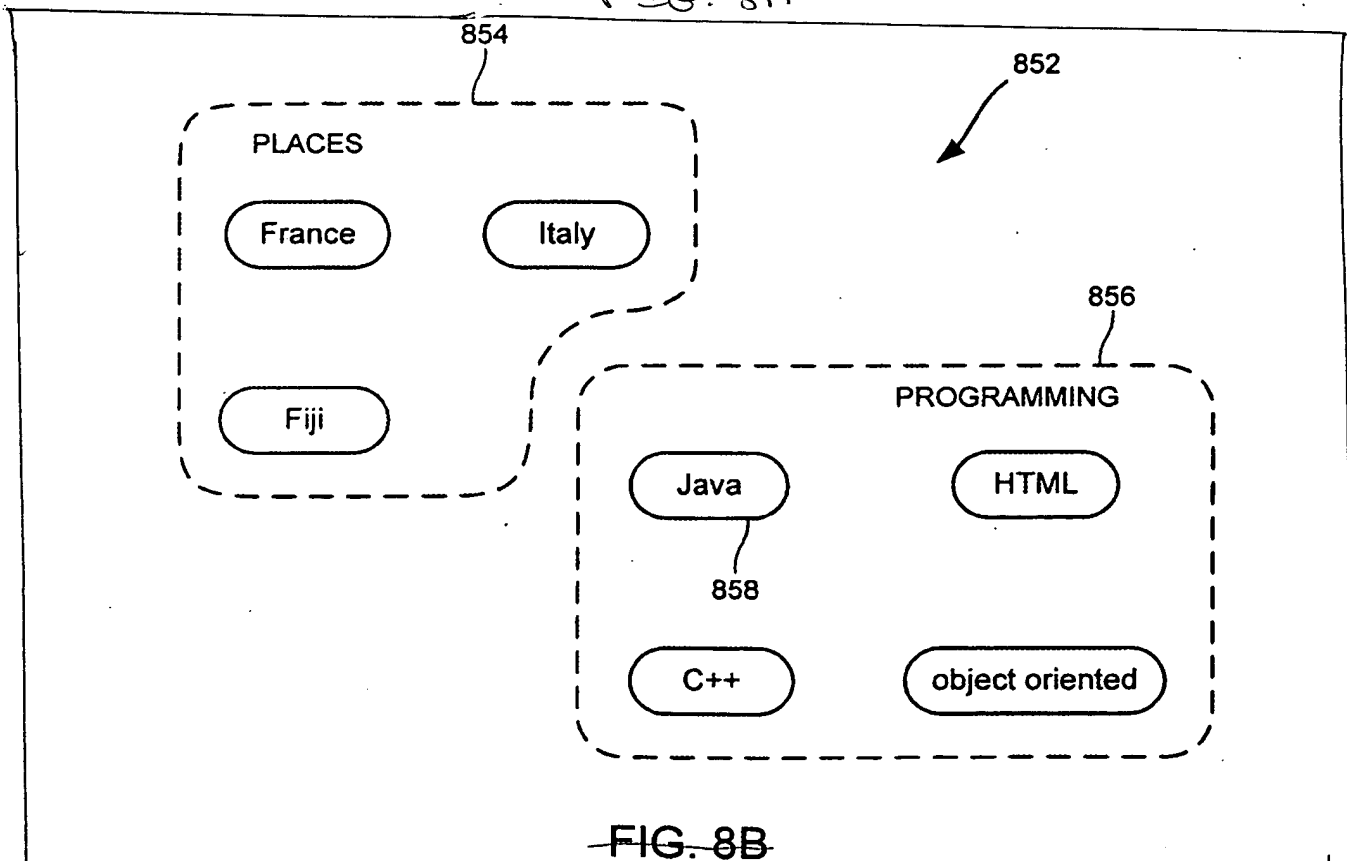
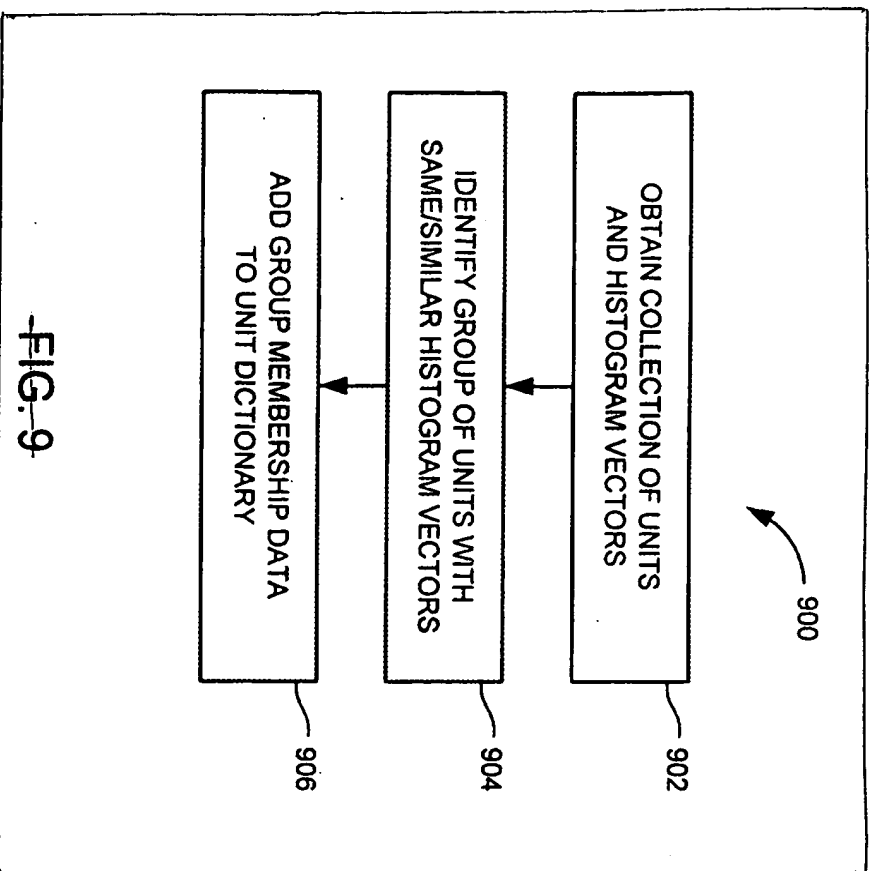
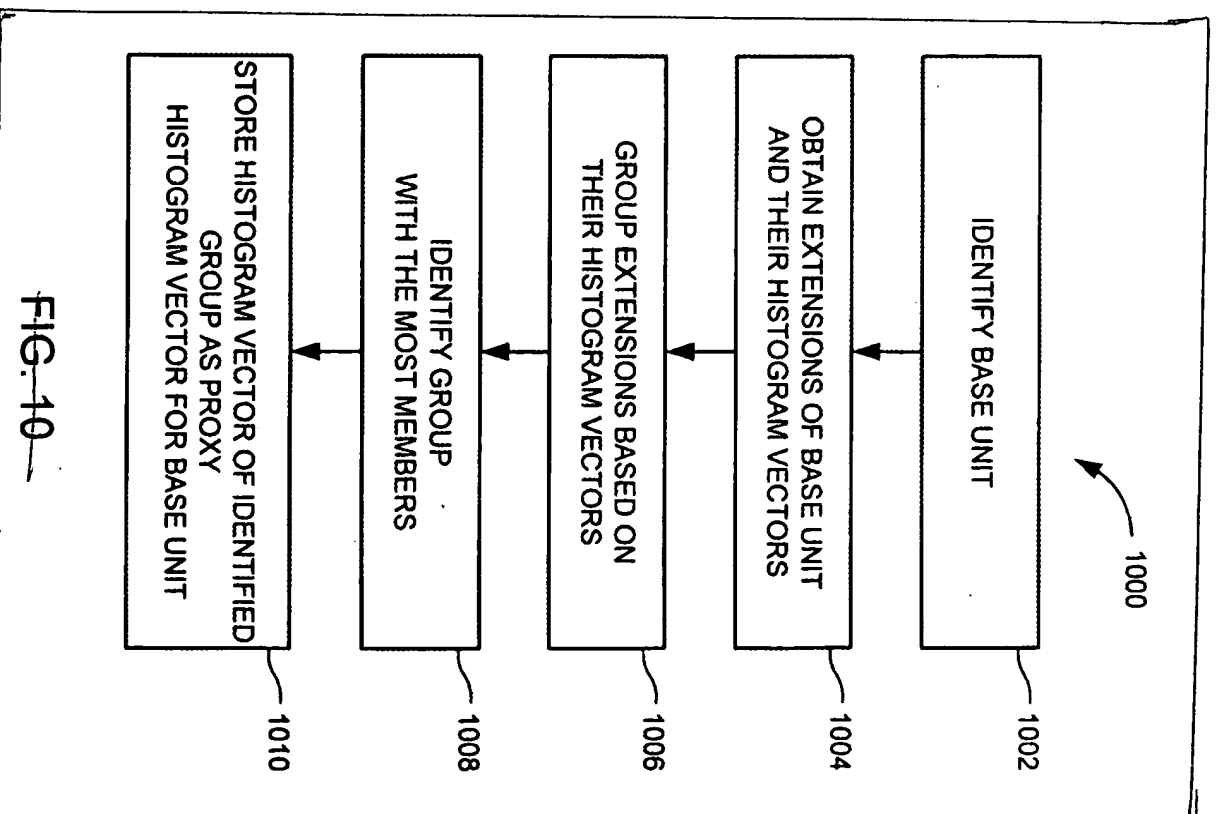


FIG. 8B



-FIG. 9

FIG. 9



-FIG. 10

FIG. 10

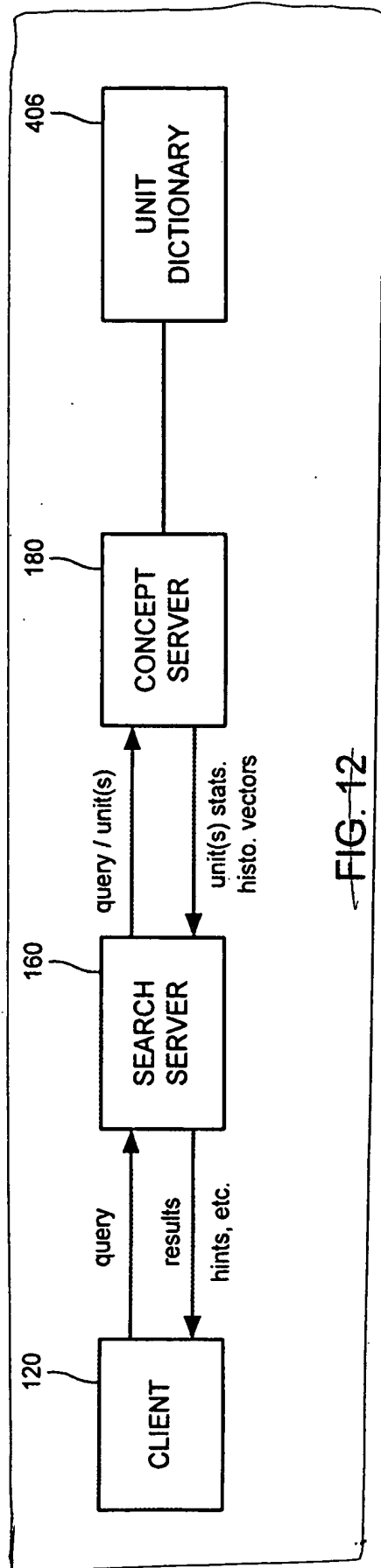
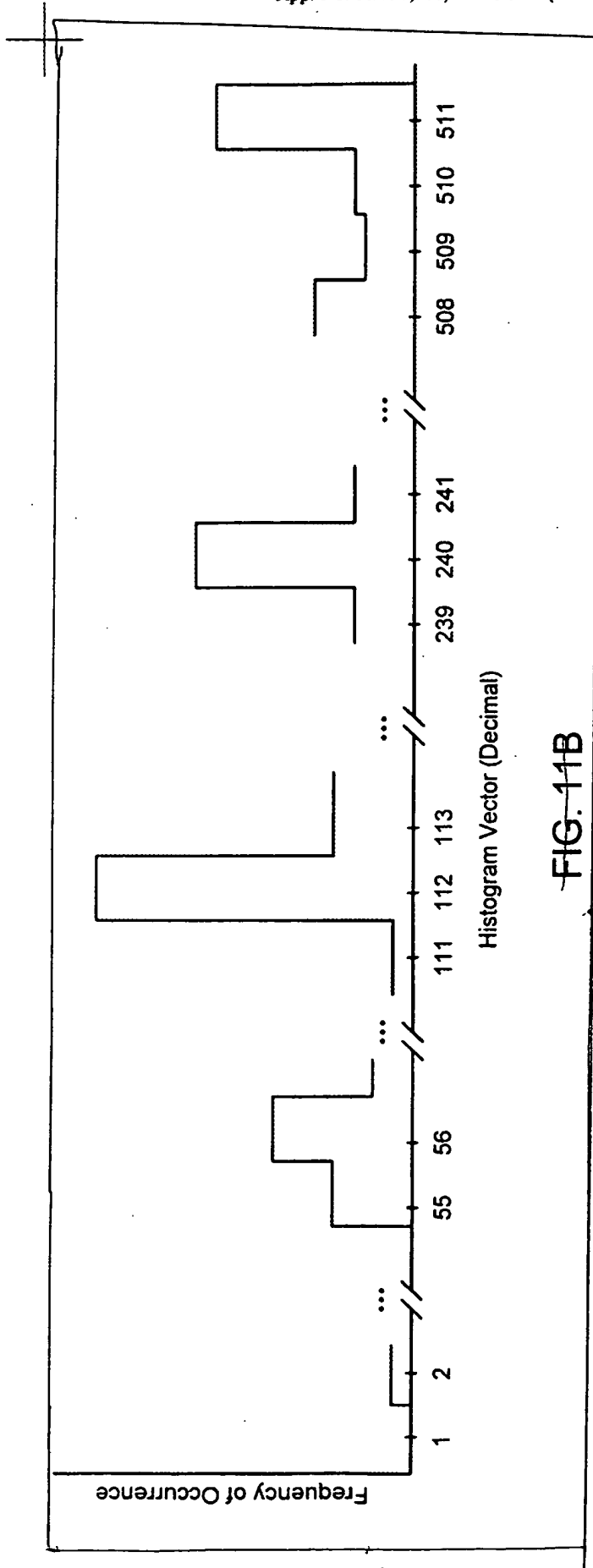


FIG. 12